

## **Domestic examination for newly arrived refugees: Guidelines and discussion of the history and physical examination**

Over 600,000 refugees have resettled in the United States over the past decade, with a steady increase in numbers since 2006 [1]. Refugees arrive from around the globe and settle throughout the United States. Depending on their country of origin, refugees are at increased risk for many diseases, both infectious and noninfectious, not commonly seen in the native US-born population. Conditions such as tuberculosis and sexually transmitted infections are particularly important to recognize early, given their potential public health consequences.

The initial history and physical (H&P) examination is a critically important first step in the assessment of newly arrived refugees. A thoughtful H&P can both assist in identifying disease and help refugees develop a sense of trust in our medical system and in the care being provided (e.g., in many cultures a clinical encounter is viewed as useless if a physical examination is not performed during the visit). Given the complexity of the domestic medical screening visit, it is vital that clinicians set aside an adequate amount of time, create a trusting environment, and provide competent interpretation services to facilitate compassionate and culturally appropriate history acquisition and performance of the physical examination.

### *Performing a History:*

The first step in the examination of a newly arrived refugee is to obtain a detailed history, including any current symptoms, past medical problems, medications, allergies, social/family history, and a mental health assessment. Use of professionally trained interpreters (e.g., preferably in person, bilingual, bicultural, and medically trained) for any patient with limited English skills is highly encouraged.

Initially, the encounter should be dedicated to addressing the immediate health concerns of the patient. This is important to determine if an active disease is present, but more importantly, to establish a trusting relationship with the patient.

The past medical history can be difficult due to lack of recall, lack of previous accurate diagnosis, and different health paradigms and beliefs of what conditions constitute significant past diseases. Questions should be asked about prior hospitalizations, episodes of severe illness, chronic conditions, previous injuries, surgeries (including dental procedures), and blood transfusions.

Vaccination history should also be reviewed, as discussed in the vaccine section.

A medication history should include nonprescription (over-the-counter medications), as well as an inquiry about use of traditional and/or herbal remedies and therapies. Use of such therapies is common and can have significant health consequences due to drug-drug interactions, teratogenicity, and contamination with toxins [2-4].

A family history should be sought, although it is generally of limited value. Information about major diseases, such as diabetes, sickle-cell anemia and hypertension, may be solicited, although patients may be more aware of acute illnesses in family members, such as malaria, and may not have a firm understanding of previous chronic conditions of familial consequence.

The social history should be detailed. An important component is reviewing the patient's travel history – from country of birth to the route taken prior to arrival in the United States. This aspect of the history enables clinicians to determine previous geographic exposure to infections and/or diseases and provides insight into the type and quality of health care available to the patient prior to immigration. Current living situation and family structure should be discussed, as this provides invaluable information regarding the patient's current support network and safety at home or in their current living situation. Occupational history is also important to discuss, as this will help to determine past environmental and chemical exposures. In addition to the usual questions regarding use of alcohol, tobacco, and illicit drugs, clinicians should inquire about the use of substances which are commonly used in certain areas and can present potential legal or health consequences (e.g., betel nut, commonly used in Thailand and Malaysia, sheesha/argileh, commonly used in the Middle East, and khat, commonly used in East Africa and the Arabian Peninsula) [5-8]. Education level and literacy should be determined; results should be used to ensure that health information and other resources are provided at an appropriate level. An estimated two-thirds of refugees experience some form of anxiety or depression [9]. In addition, exposure to violence, trauma, and upheaval prior to immigration, as well as poverty, unemployment, social isolation, and language difficulties following immigration, likely contribute to the increased rate of psychiatric conditions [9, 10]. Therefore, a mental health screen may be performed according to resources available for intervention for conditions identified.

A detailed review of systems should be obtained, keeping in mind particular infections or illnesses that the patient may have based on travel history and country of origin. Particularly

important symptoms to include are fever, weight loss, night sweats, pulmonary complaints, diarrhea or abdominal complaints, pruritis, and skin lesions/rashes. In women, a menstrual history and history of contraception should be obtained; this may assist in deciding on pregnancy testing and with advice on contraception (e.g., frequently women are receiving depo contraceptives and may be due for an injection).

#### *Performing the Physical Exam:*

A thorough physical exam is critical and may reveal a wide range of underlying diseases, from leprosy to congenital heart disease. Providers should be aware that for some patients this may be the first full exam they have experienced; all steps should be clearly explained and same-sex examiners provided if requested. It can be wise to reassure the refugee that this examination is for their health and not for regulatory purposes (prior to this, examinations done have primarily been performed to identify conditions that may exclude the refugee from admittance--the domestic examination is primarily to benefit the refugees health). Nutritional status should be assessed for all patients. Growth and development measures, such as height, weight, and head circumference in children, should be recorded and are detailed in the Growth and Development section. For children, these parameters should be plotted on standardized growth charts and may be compared with records when available. (Growth charts from camps may be located in the blue and white IOM bag.) Sexual maturity should also be determined. Hearing and vision should be assessed and appropriate referral provided to individuals with abnormal findings.

Vital signs, including heart rate, respiratory rate, and blood pressure, should be measured and compared with normal for indication of underlying illness or disease. A careful oral examination should be performed; dental issues are the most commonly reported pathologic conditions reported to States on the medical screening of newly arrived refugees. For example, in Buffalo, New York, 42% of refugee patients screened required referrals for dental care and 62% of refugee children in Massachusetts had dental caries [11,12]. Appropriate referral should be provided for intervention when indicated. A careful inspection of the skin can help to diagnosis both localized and systemic diseases. Skin examination may also reveal traditional healing techniques, such as burn sticks, cupping and coining, which may indicate current or past disease. Cardiac auscultation should be performed on all patients, bearing in mind that individuals from developing regions are more likely to have undiagnosed congenital heart disease and rheumatic valvular disorders than the native-born US population [13, 14]. Careful respiratory examination should be performed, particularly in individuals with pulmonary or constitutional signs or

symptoms. The abdominal examination should include careful assessment for hepatic and splenic enlargement, conditions that can be associated with a wide variety of conditions. A full lymph-node exam should also be performed.

The genital exam is an important part of the complete physical examination for both sexes. However, the initial visit may not be an appropriate time or setting to perform a full genital examination, particularly if there is concern for past sexual abuse, or if it would be particularly against a cultural norm (e.g., a male physician and a young Somali female). If not performed at initial screening, assistance should be provided with primary care follow-up where a relationship may be developed with the care provider.

A complete history and physical examination can identify important health issues that may be solved at the domestic medical examination visit or more chronic conditions that need further evaluation or management. The H&P in a newly arrived refugee is the essence of the art of medicine, and to be performed well demands geographic knowledge of disease, cultural competence and the development of trust, thoroughness, and experience by the provider.

## References

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